COVID-19 Building Safety
Plan UBC Beaty
Biodiversity Centre
2212 Main Mall, Vancouver, BC V6T 1Z4

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Introduction
The Beaty Biodiversity Centre is home to the Biodiversity Research Centre (BRC) and the Beaty Biodiversity Museum (BBM). The Biodiversity Research Centre has over 70 faculty members (PIs) from multiple units at UBC. Thirty (30) of those PIs have faculty appointments in either Botany or Zoology Departments in the Faculty of Science. The Beaty Biodiversity Museum is a natural history museum housing 6 biological research collections and a public gallery.

Following curtailment in March 2020, UBC is implementing a phased resumption of on-campus research from the beginning of June, and adopting a gradual approach over the summer months. Additionally, UBC is implementing a phased reopening of campus attractions, with BBM research staff returning to campus at the end of May or early June, and a public reopening at the end of June or early July.

This document focuses on the BRC and BBM research activities and procedures and will be updated when the BBM is reopening to the public. This plan includes a review of BRC and BBM operational activities and directives to ensure effective controls are in place to reduce and prevent infection from COVID-19. This document will be updated when government and / or University mandated requirements are changed. https://covid19.ubc.ca/

Approval Process
Faculty members (PIs) in the BRC who wish to reopen their lab must complete a Botany/Zoology Request to Restart/Return to Research safety plan. Each plan will be reviewed by their home department head to ensure compliance with Faculty of Science and UBC guidelines. Prioritization of research personnel within an individual PI’s laboratory will be determined by the PI and approved by the Department Head. Once the Department Head has approved the PI’s plan, the faculty member should notify the BRC Director and Administrator that their lab will reopen during Phase 1.

No PI or research personnel will return to the BRC, and no lab will operate until their ‘Request to Restart/ Return to Research’ application is approved by their home department, and each room has the ‘Access Agreement’ form from the VPRI posted indicating maximum occupancy.

Shared Responsibilities
Responsibility of the BRC Director
Responsible for ensuring that the guidelines and safety plan are shared with all faculty and research personnel housed in the BRC.

Responsible for ensuring that signage is in place to ensure physical distancing and cleaning protocols are practiced in common areas (e.g., elevators, social rooms, washrooms, stairwells), and shared facilities that are under our purview. These may be carried out by Building Ops, department staff or research personnel.

Responsible for putting hand sanitizer and disinfectant at key points (e.g., near entrances, entrances to shared labs, and common spaces) for personnel, if not supplied by Building Operations.

Responsibility of Botany/Zoology Home Department Heads
Responsible for approving faculty plans that ensure physical distancing and safe working practices in the PI’s labs within the BRC, and for making it clear that PIs must enforce the measures taken.

Responsibility of Faculty Members and Research Personnel
Faculty members are responsible for prioritizing who can return to work, and establishing procedures that allow safe lab work. PIs should check periodically to ensure that procedures are being observed, and adjust (as needed, but observing general principles).

Research personnel/trainees are responsible for observing these rules and procedures.

**General Procedures (Guidelines for the Phased Resumption of Workplace Activity during the Ongoing COVID-19 Pandemic)**

A gradual restart does not mean a return to normal workplace conditions. Time spent at the workplace must still be kept to a minimum. Conducting on-campus research and scholarship will be limited to those who require on-campus resources and cannot conduct this work remotely. In keeping with public health guidelines, the majority of our faculty and staff will need to continue working remotely, wherever possible. For more information, visit [https://research.ubc.ca/planning-phased-resumption-campus-research-scholarship-and-creative-activities](https://research.ubc.ca/planning-phased-resumption-campus-research-scholarship-and-creative-activities).

In Phase 1, the goal is to reduce the number of people in buildings and labs to about ⅓ of normal occupancy in order to allow for physical distancing and safe practices in lab spaces and in common spaces, but a staged process (20%, 40%, etc.) may be more appropriate. PIs and their trainees should think about who comes back first, second, etc. The staged return to activities should be handled within the labs and also include some level of rotation of personnel.

Your self-compliance with the guidelines in this document is of the utmost importance. Each lab group is responsible for adhering to policies put in place by UBC, their Faculties, and their home department. Failure to adhere to these policies also increases the risk of an outbreak in our community, and lack of compliance could ultimately lead to closure of the facility.

We also ask that the members of the community do their best to be flexible as we all adapt to new ways of operating. PIs and trainees shall work in a manner that is cooperative, respectful and friendly to minimize (and if necessary) resolve interpersonal conflicts related to access to shared space.

A. Before you come to UBC, monitor your health status. Common symptoms according to the WHO are:
   - Fever
   - Dry Cough
   - Tiredness
   - New loss of sense of taste/smell
   - Sore throat
   - Reduced arterial O₂ saturation is perhaps the earliest sign of infection

   If you are experiencing any of these symptoms, use the BC Health Self-Assessment tool to determine if you require further testing or medical care: [https://bc.thrive.health/](https://bc.thrive.health/). No one with symptoms should leave their home. Furthermore, if members of your immediate family/roommates (i.e. if a member of the household) are ill, you should also remain at home in quarantine. If you fall ill, you should inform all colleagues with whom you have come into contact. They too should go into self-isolation, and monitor signs and symptoms for 14 days.

B. Each PI/supervisor must establish a list of the most critical personnel who need to physically
come into the workplace and adhere to home department principles and procedures for return to research. PIs should notify the BRC Director and Administrator with the names of their research personnel who are returning to campus. All other staff are to be encouraged – and supported – to continue working from home as much as possible (until Provincial authorities indicate otherwise).

C. Physical distancing of a minimum distance of two metres (6 feet) between persons is to be maintained at all times. This applies regardless of whether you are in an office or any common or shared space. The training and ability to work without supervision must be considered by the supervisor in relation to social distancing. Those who require research specific training that cannot be completed while adhering to social distancing are not appropriate for inclusion in this phase of resumption.

D. The number of persons allowed in specific spaces must not be exceeded. Maximum occupancy will be posted outside each lab door, shared facility, or common area. Temporary reminder signage may be posted in critical spaces. The PI’s ‘Request to Restart/Return to Research’ documents will detail room and floor level occupancy plans.

E. Avoid in-person social interactions and continue to communicate via digital means. According to University directives, face-to-face meetings are discouraged and should be avoided whenever possible (until post-pandemic normalization). Virtual meetings should be arranged whenever possible. Meetings or training sessions deemed essential may need to occur. In such cases, social distancing requirements and all BRC space-use restrictions must be strictly adhered to. Please refer to https://riskmanagement.sites.olt.ubc.ca/files/2020/04/Guidelines-for-Meetings-Trainings-FINAL.pdf

F. Building Access is limited to 7:00 am – 6:00 pm Monday-Friday to ensure custodial staff can clean labs and other spaces. It is recognized that a small number of researchers have scientifically justified research protocols that require sampling/observations/data collection over an extended period of time and beyond regular working hours. The protocol for work between 8:00 pm – 7:00 am or on weekends and stat holidays will be as follows:

1. The PI must notify their department head / director and building administrator that there will be work continuing beyond the regular hours.
2. Building administrators should notify security ahead of who will be working extended hours (including time, date, location) so that they can be given access if they forget or misplace their access card.
3. The researchers will post a notice on the lab door that late-night or weekend work is underway, indicating name(s) and working hours.
4. The researchers in the lab must abide by their department or unit’s working-alone policy (i.e., two-person working principle) with a safety plan to ensure that there are regular checks on researchers.
5. PIs are responsible for ensuring that their research staff are trained in appropriate cleaning protocols for their lab/research space, including cleaning high contact surfaces, benches, shared equipment, fume hood sash handles, doorknobs and other common areas within their labs on weekends.
6. Researchers must respect the custodial servicing of labs and spaces during regular working hours and be mindful of custodial staff working in other areas of the building while researchers are in their labs afterhours.

G. Labs will establish a shift system and coordinate shifts within and between groups so all areas remain below the established maximum occupancy. Coordinate use of common areas or shared resources, with a booking system, if needed. This is to be done at the local level. Follow all established regulations and guidelines.

H. Personal Protective Equipment (PPE) (such as gloves and masks)
The University has produced official, university-wide guidance documents on the procurement and use of PPE during the COVID-19 pandemic. All occupants of the building are to reference and adhere to these policies, standards, and practices. These resources can be found here: https://srs.ubc.ca/covid-19/health-safety-covid-19/working-safely/personal-protective-equipment/

UBC employees may choose to wear a non-medical mask or homemade mask at work, provided it does not interfere with them safely carrying out their duties. UBC asks the campus community to be respectful of students, faculty and staff who choose to wear masks.

Researchers should continue to follow UBC ‘Safety and Risk Services’ (SRS) Guidelines for Lab specific PPE (https://srs.ubc.ca/health-safety/research-safety/general-lab-safety). Lab coat laundry will be coordinated through BioSciences Shipping & Receiving.

I. Sanitize and disinfect with approved products (e.g. 70% isopropanol, 80% ethanol, 0.1% sodium hypochlorite solution or equivalent) at the start and end of a shift. Commonly touched areas and shared equipment that you touch should be cleaned and disinfected when you finish working. Special care should be used in common spaces, if these are used at all. The BRC will make sanitizing supplies available for common areas.

J. To get to work, private methods of transportation are preferred. Free parking permits are available thru end of August 2020 (https://parking.ubc.ca), but parking regulations might change. Where proximity allows, biking and walking may be good options. If you need to take transit, try your best to maintain social distancing at all times and follow City of Vancouver and BC recommendations (hand washing, use of hand sanitizer etc.).

**Workspace Specific Operational Activities**

This COVID-19 Building Safety Plan aligns with BBM, Botany and Zoology Department return to research guidelines as appropriate. PIs and research personnel are responsible for adhering to policies established by their home departments and safety procedures in this plan.

**HANDWASHING/SANITIZING STATIONS**

Hands should be washed frequently. Hand sanitizer dispensing stations are located inside three BRC building entrances (front/main, courtyard, and loading dock) and BBM entrance. Spray bottles of hand sanitizer will be placed at the entrance of each lab, common areas and shared facilities. Custodial Services will refill the dispensers at the front entrances regularly. If you notice a dispenser is empty, you can note the time and location and place a trouble call via 604.822.2173. Other dispensers can be refilled by notifying BRC Administrator Katie Beall, brcadmin@biodiversity.ubc.ca.
PHYSICAL DISTANCING SIGNAGE

“Stand Here” floor decals will be placed two meters apart in areas where people would be required to line-up or wait to enter spaces that have already reached maximum capacity (examples include; washrooms, kitchen areas, and elevators). Directional floor tape will be used to mark directional flow of workspaces so that people do not cross paths when walking through spaces. Physical distancing posters and maximum room occupancy signs will be posted throughout the building.

BUILDING WORKPLACE TRAFFIC FLOW

- **Building Entrances** – Building entrances will remain locked 24/7. Users with programmed card access can enter the building via ground floor entrances that are equipped with card scanners. Do not let others enter behind you.
- **Hallways** – Researchers should take precautions when moving through the building. The hallways provide enough visibility to practice physical distancing, but you may need to be patient and let other people clear the hallway before you enter. To reduce surface touching, doors that can be propped open will be.
- **Elevators** – Building Operations will install signage in elevators for elevator capacity guidelines for physical distancing protocols. Users are not to exceed these temporary occupancy ratings. Expected elevator occupancy information is presented on each floor’s individual COVID Safety Floor Plan (see Appendix 2). Elevator 1 is a freight elevator and can allow for 2 people, but only when it is necessary to move heavy equipment. Whenever possible, usage of elevators should be prioritized for those with accessibility needs or transporting materials to prevent bottlenecks in the building.
- **Stairwells** – Where visibility is limited, stairwells have been assigned “Up Only” or “Down Only” (flow direction) designations and corresponding signage has been posted. Occupants are only to travel in stairwells in the designated direction. Stairwell direction information is presented on each floor’s individual COVID Safety Floor Plan (see Appendix 2).
- **Directional Flow** – High occupancy areas in the BBM public space, like the auditorium, now have temporary designated entry and exit points to determine traffic flow. Corresponding entry and exit signage have been posted for these spaces. Occupants are to enter and exit these spaces in accordance with posted signage. Traffic flow in the BBM collections gallery will be one-way to allow the public to navigate through the collections and exhibits. This is presented on the COVID Safety Floor Plan (see Appendix 2).

BUILDING SPACE OCCUPANCY RESTRICTIONS

- **BRC and BBM Wet and Dry Laboratory / research spaces / collections**
  Various types of laboratory and research spaces have been assigned maximum occupancy ratings (based on COVID social distancing requirements). See Appendix 1. To ensure a minimum 2m distance can be kept in the lab, the following applies:
  - Occupancy limits are posted outside lab entrances. Maximum of 1 person in any bay at any one time. Maximum of 1 person in a shared instrument/support room. All other rooms will be sign-posted with the maximum occupancy based on area and workstation setup of room.
  - Coordinate shifts within labs and shared labs (e.g. lab shared with two or more other research groups) to remain below the lab’s maximum occupancy. This is generally done at the local level, among the users of those particular spaces. The written
schedule stating who is authorized to be in the lab on a given day or week will be posted at the lab entrance, and archived by the PI for 3 weeks.

- If physical distancing requires that students work alone, they should follow UBC and home department work alone policies. More information can be found here: https://srs.ubc.ca/health-safety/safety-programs/personal-safety/6969-2/
- In cases where students or research personnel must work together (moving a piece of heavy equipment or work on equipment that requires two operators), suitable PPE should be worn.

- Visitor and BRC researcher access and usage of BBM collections areas will be strictly by appointment only and with permission granted by the BBM Director to ensure that appropriate social distancing can be maintained.
- Regular office use is not permitted in Phase 1 as per Faculty of Science directive. Work that can be done remotely (i.e. from home) should continue to be done remotely. Exemptions may be applied on a case-by-case basis for faculty and research personnel who cannot work at home. These requests will require explicit permission of the employee or PI’s home department head and Director of the BRC/BBM. If permissions are granted, shared offices cannot accommodate more than one person at any time.
- Meeting rooms are closed during Phase 1.
- ZCU Grad computer lab is closed during Phase 1, but occupants may pick-up colour printouts if necessary. Research Personnel who require access to specialized equipment (e.g. CLC Genomics station) in the computer lab should contact Alistair Blachford (alistair@zoology.ubc.ca) for approval.
- Autoclaves, Environment chambers, and other shared equipment zones have a max occupancy of 1. High-contact areas must be wiped down with disinfectant prior to and following use. [Autoclaving procedures may change temporarily. BioSciences personnel may help during Phase 1, please follow home department updates.]
- Common kitchens are closed for any food prep or storage, but may be used for hand washing. Occupants are encouraged to bring food that is properly contained and ready to eat without needing to be refrigerated, heated, or otherwise prepared in common kitchens. Occupants are encouraged to eat outdoors. If occupants need to walk through the kitchen to access shared equipment, the maximum occupancy is 1 person.
- Common social spaces and open areas (the Black Hole, atrium, tables, etc.) are not to be used to hold meetings or for socializing, but will remain available to occupants for eating lunches, etc. No adjacent seating allowed. Adhere to posted occupancy signs.
- Washrooms are restricted to a maximum of one occupant at one time. Showers will remain available for use, but a maximum of one occupant in each shower/locker room at one time. Door handles, faucet handles (sink and shower) should be sanitized/disinfected after use.
- Pets are not permitted during Phase 1. Please keep your dogs at home. This will be reviewed again in Phase 2.

Communications Plan
This document will be disseminated electronically to occupants in the Beaty Biodiversity Centre. A hard copy of this document will also be posted on the Safety Quick Reference bulletin boards in the building.
Prior to returning to campus, all UBC community members will be required to complete an online training course (details to be provided as soon as available).
**Monitoring**

According to University directives, monitoring of compliance with COVID safety plans will be at the supervisor level. The BRC and BBM will continue to follow the university's accountability structure as laid out in the university safety policy.

There will be an established “responsible person” that researchers can contact daily from 9am-5pm. This person will also do a sweep of the lab wings at the end of the day to ensure occupants are done with their experiments before custodial staff arrive each evening. This person and their location plus contact information will be announced to the building email list. All ‘Responsible Persons’ will be certified Fire Wardens, responsible for BERP protocols [https://wpl.ubc.ca/browse/srs/epc/courses/wpl-srs-fwtc](https://wpl.ubc.ca/browse/srs/epc/courses/wpl-srs-fwtc).

Per home department protocols, supervisors cannot require research personnel or staff to work if their health, or the health of those in their household, creates unacceptable risk. If you are unable to work, do not report to work and contact your supervisor. If you are unable to contact your supervisor or for assistance in having a discussion with your supervisor, graduate students should contact your graduate advisor. Researchers may also report infractions confidentially via email to accessfeedback@science.ubc.ca, monitored by Mark MacLachlan, Associate Dean of Research & Graduate Studies.

**Emergency Procedures:**

In the event of an emergency, follow updated building emergency procedures, while adhering as best as possible to social distancing practices. A quick reference safety bulletin board is located near the labs and elevator 1 on each floor, and a hard copy of the updated procedures will be posted there. The Beaty Biodiversity Centre’s Emergency Response Procedures are found at: [https://biodiversity.ubc.ca/sites/biodiversity.ubc.ca/files/u81/berp_2019_beatybiodiversitycentre.pdf](https://biodiversity.ubc.ca/sites/biodiversity.ubc.ca/files/u81/berp_2019_beatybiodiversitycentre.pdf)
Appendix 1: Lab and Research Personnel Allowances for Phase 1

Allowances have been determined based on space assignments, and the number of bays assigned to each researcher. Occupancy is subject to home department approval. Principal Investigators in each lab are encouraged to work together to plan usage of space in the lab, while strictly abiding by the constraint of 1 individual working per bay during phase 1. Building Occupancy is approximately 250 during normal operations.

<table>
<thead>
<tr>
<th>FLOOR – WET and DRY LAB</th>
<th>LABORATORY PIs / SHARED FACILITY</th>
<th>PHASE 1 estimate (1 researcher/bay)</th>
<th># of Researchers per floor</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>TOTAL NUMBER of STAFF ALLOWED at ONE TIME</td>
<td>85</td>
<td></td>
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<tr>
<td></td>
<td>(1/3 normal occupancy)</td>
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<tr>
<td>1 - 150</td>
<td>Schluter/Irwin</td>
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<td>Parfrey/Shared Bioanalyzer</td>
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<td>1 - 180</td>
<td>Harley/O’Connor</td>
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<td>Shared Facility – Digitization Room</td>
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Appendix 2: Building COVID Safety Floor Plans
1st floor
Legend

Elevators:
- Max 1 person
- Max 2 person freight

Stairs:
- "Up only" staircase
- "Down only" staircase
- Max 1 person per level

Museum directional flow

Preferred entrance/exit